

INTERNATIONAL SEARCH REPORT

International Application No

EP2004/012058

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C67/08 C07C69/017 C07C69/16 C07D311/72

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 21 49 159 A (EASTMAN KODAK CO.) 6 April 1972 (1972-04-06) cited in the application claims 1-9	1-7
Y	US 6 103 924 A (N. SHI ET AL.) 15 August 2000 (2000-08-15) claims 1-21	1-7
Y	WO 03/051812 A (ROCHE VITAMINS AG) 26 June 2003 (2003-06-26) cited in the application claims 1-14	1-7
Y	US 3 053 884 A (G. P. TOUEY, R. H. GOINS) 11 September 1962 (1962-09-11) claims 1-8	1-7
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- * & * document member of the same patent family

Date of the actual completion of the International search

14 February 2005

Date of mailing of the International search report

25/02/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Herz, C

INTERNATIONAL SEARCH REPORT

International Application No

EP/EP2004/012058

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	M. SCHNEIDER ET AL.: "Industrial application of Nafion-systems in rearrangement-aromatisation, transesterification, alkylation, and ring-closure reactions" APPLIED CATALYSIS A GENERAL, vol. 220, no. 1-2, 2001, pages 51-58, XP002317570 the whole document	1-7
Y	US 2002/004619 A1 (S. KRILL, K. HUTHMACHER) 10 January 2002 (2002-01-10) claims 1-14	1-7
Y	EP 0 850 910 A (DAICEL CHEMICAL INDUSTRIES, LTD.) 1 July 1998 (1998-07-01) claims 1-8	1-7
Y	DE 198 05 690 A (DEGUSSA-HÜLS) 19 August 1999 (1999-08-19) claims 1-11	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

EP2004/012058

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 2149159	A	06-04-1972	DE 2149159 A1 US T900015 I4	06-04-1972 25-07-1972
US 6103924	A	15-08-2000	DE 19817644 A1 BR 9902048 A CA 2269404 A1 CN 1234389 A DE 59909987 D1 DK 952137 T3 EP 0952137 A1 ID 22456 A IL 129529 A IN 185858 A1 JP 11349533 A TW 490459 B	28-10-1999 02-05-2000 21-10-1999 10-11-1999 26-08-2004 08-11-2004 27-10-1999 21-10-1999 25-11-2001 12-05-2001 21-12-1999 11-06-2002
WO 03051812	A	26-06-2003	AU 2002356637 A1 WO 03051812 A1 EP 1463708 A1	30-06-2003 26-06-2003 06-10-2004
US 3053884	A	11-09-1962	NONE	
US 2002004619	A1	10-01-2002	DE 10017494 A1 AT 259772 T AU 4835701 A CA 2399248 A1 CN 1420859 T DE 60102078 D1 DE 60102078 T2 DK 1268390 T3 WO 0177058 A1 EP 1268390 A1 JP 2003530377 T MX PA02009115 A	11-10-2001 15-03-2004 23-10-2001 18-10-2001 28-05-2003 25-03-2004 23-12-2004 10-05-2004 18-10-2001 02-01-2003 14-10-2003 12-03-2003
EP 0850910	A	01-07-1998	CN 1186065 A ,C DE 69708450 D1 DE 69708450 T2 EP 0850910 A1 JP 10237020 A US 5908956 A	01-07-1998 03-01-2002 16-05-2002 01-07-1998 08-09-1998 01-06-1999
DE 19805690	A	19-08-1999	DE 19805690 A1 BR 9900655 A CA 2261404 A1 EP 1008584 A1 ID 21942 A IN 186229 A1 JP 11292812 A US 5969176 A	19-08-1999 09-05-2000 12-08-1999 14-06-2000 12-08-1999 14-07-2001 26-10-1999 19-10-1999